

Name:

Answers

1. Multiply  $x(x-4) = x^2 - 4x$

2. Multiply  $5x(x^2 + 2x - 4) = 5x^3 + 10x^2 - 20x$

3. Multiply  $(x-2)(x-5) = x^2 - 7x + 10$

4. Multiply  $(x+2)(x-5) = x^2 - 3x - 10$

5. Multiply  $(x+5)(x-5) = x^2 - 25$

6. Multiply  $(2x+5)(4x+3) = 8x^2 + 26x + 15$

7. Multiply  $(2x+5)(4x-3) = 8x^2 + 14x - 15$

8. Factor  $x^2 - 4x = x(x-4)$

9. Factor  $5x^3 + 10x^2 - 20x = 5x(x^2 + 2x - 4)$

10. Factor  $x^2 - 7x + 10 = (x - 2)(x - 5)$

11. Factor  $x^2 - 3x - 10 = (x - 5)(x + 2)$

12. Factor  $x^2 - 25 = (x - 5)(x + 5)$

13. Factor  $8x^2 + 26x + 15 = (2x + 5)(4x + 3)$

14. Factor  $8x^2 + 14x - 15 = (2x + 5)(4x - 3)$

15. Solve  $x(x - 4) = 0 \Rightarrow \{0, 4\}$

16. Solve  $(x + 2)(x + 5) = 0 \quad \{-2, -5\}$

17. Solve  $(x - 2)(x + 5) = 0 \quad \{2, -5\}$

18. Solve  $(x + 5)(x + 5) = 0 \quad \{-5\}$

19. Solve  $(2x+5)(x+3)=0$

$$\left\{-\frac{5}{2}, -3\right\}$$

20. Solve  $(2x-5)(4x+3)=0$

$$\left\{\frac{5}{2}, -\frac{3}{4}\right\}$$

21. Solve  $5x-20=0$

$$5(x-4)=0$$

22. Solve  $5x^2-20x=0$

$$5x(x-4)=0$$

$$\{0, 4\}$$

23. Solve  $x^2+7x+10=0$

$$(x+2)(x+5)=0$$

$$\{-2, -5\}$$

24. Solve  $x^2+3x-10=0$

$$(x+5)(x-2)=0$$

$$\{-5, 2\}$$

25. Solve  $x^2-25=0$

$$(x-5)(x+5)=0$$

$$\{5, -5\}$$

26. Solve  $8x^2+26x+15=0$

$$(2x+5)(4x+3)=0$$

$$\left\{-\frac{5}{2}, -\frac{3}{4}\right\}$$

27. Solve  $8x^2+14x-15=0$

$$(2x+5)(4x-3)=0$$

$$\left\{-\frac{5}{2}, \frac{3}{4}\right\}$$